

(FILE 'HOME' ENTERED AT 14:05:37 ON 16 SEP 2002)

FILE 'REGISTRY' ENTERED AT 14:05:46 ON 16 SEP 2002

L1           1 S FERULIC ACID/CN  
L2           1 S CAFFEIC ACID/CN  
L3           1 S CHLOROGENIC ACID/CN

FILE 'AGRICOLA, BIOBUSINESS, CAPLUS, CA, USPATFULL' ENTERED AT 14:07:43  
ON 16 SEP 2002

L4           11157 S L1  
L5           10858 S L2  
L6           8918 S L3  
L7           1313 S L4 AND L5 AND L6  
L8           19 S L7 AND VITAMINS  
L9           4 S L7 AND HYPERTENSION

L8 ANSWER 1 OF 19 AGRICOLA

ACCESSION NUMBER: 95:61480 AGRICOLA

DOCUMENT NUMBER: IND20482444

TITLE: Phenolic compounds in food and cancer prevention.

AUTHOR(S): Huang, M.T.; Ferraro, T.

CORPORATE SOURCE: Rutgers, The State University of New Jersey,  
Piscataway, NJ.

AVAILABILITY: DNAL (QD1.A45)

SOURCE: ACS symposium series, 1992. No. 507. p. 8-34  
Publisher: Washington, D.C. : American Chemical  
Society, 1974-  
CODEN: ACSMC8; ISSN: 0097-6156

NOTE: In the series analytic: Phenolic compounds in foods  
and their effects on health II: Antioxidants and  
cancer prevention / edited by M.T. Huang, C.T. Ho and  
C.Y. Lee.

Developed from the Fourth Chemical Congress of North  
America, August 25-30, 1991, New York, New York.

Includes references

PUB. COUNTRY: District of Columbia; United States

DOCUMENT TYPE: Article

FILE SEGMENT: U.S. Imprints not USDA, Experiment or Extension

LANGUAGE: English

AB A general overview of the phenolic compounds in food and health is  
presented, with emphasis on the actual amounts eaten by humans and  
possible effects on cancer. Because of the widespread occurrence of  
phenolic compounds in our food, humans ingest a large amount of phenolic  
compounds. Most phenolic compounds in food are plan flavonoids, but others  
include synthetic antioxidants such as the food additives butylated  
hydroxyanisole (BHA) and butylated hydroxytoluene (BHT), chlorogenic acid  
in coffee, caffeic acid and ferulic acid in vegetables and fruits,  
alpha-tocopherol and related compounds in oils from vegetables and grains,  
the polyphenolic catechins found in tea and red wine, carnosol in rosemary  
leaves, and curcumin in turmeric, curry and mustard. Almost all of these  
polyphenolic compounds possess several common biological and chemical  
properties: (a) antioxidant activity, (b) the ability to scavenge active  
oxygen species, (c) the ability to scavenge electrophiles, (d) the ability  
to inhibit nitrosation, (e) the ability to chelate metals, (f) the  
potential for autoxidation, producing hydrogen peroxide in the presence of  
certain metals, and (g) the capability to modulate certain cellular enzyme  
activities. These compounds share some of these biological and chemical  
properties with **vitamins** C and E, and many have been found, or  
are likely to be able, to inhibit various steps of tumor development in  
experimental animals and probably in humans. The biological activities and  
functions of phenolic compounds are reviewed, especially as they relate to  
their mechanisms of anticarcinogenicity.

AB . . . (g) the capability to modulate certain cellular enzyme  
activities. These compounds share some of these biological and chemical  
properties with **vitamins** C and E, and many have been found, or  
are likely to be able, to inhibit various steps of tumor. . .

RN 59-02-9 (.ALPHA.-TOCOPHEROL)

128-37-0 (BHT)

128-37-0 (BUTYLATED HYDROXYTOLUENE)

458-37-7 (CURCUMIN)

1401-55-4 (CATECHINS)

5957-80-2 (CARNOSOL)

7722-84-1 (HYDROGEN PEROXIDE)

7782-44-7 (OXYGEN)

25013-16-5 (BUTYLATED HYDROXYANISOLE)

327-97-9Q, 71693-98-6Q (CHLOROGENIC ACID)

331-39-5Q, 71693-97-5Q (CAFFEIC ACID)

1135-24-6Q, 97274-61-8Q (FERULIC ACID)

L8 ANSWER 2 OF 19 BIOBUSINESS COPYRIGHT 2002 BIOSIS  
ACCESSION NUMBER: 96:23533 BIOBUSINESS  
DOCUMENT NUMBER: 0788394  
TITLE: Anti-genotoxic effects in mice after the interaction  
between coffee and dietary constituents.  
AUTHOR: Abraham S K  
CORPORATE SOURCE: Sch. Life Sci., Jawaharlal Nehru Univ., New Delhi 110 067,  
India  
SOURCE: Food and Chemical Toxicology, (1996) Vol.34, No.1, P.15-20.

ISSN: 0278-6915.

FILE SEGMENT: NONUNIQUE  
LANGUAGE: ENGLISH

AB The interaction between coffee (100 mg freeze-dried home brew/kg body weight) and dietary constituents was assessed for anti-genotoxic effects against cyclophosphamide, N-methyl-N-nitro-Nnitrosoguanidine (MNNG), N-nitroso-N-ethylurea, mitomycin C and urethane (URE) in the mouse bone marrow micronucleus test. Combinations of dietary constituents consisting of (1) chlorogenic acid, caffeic acid, ellagic acid and ferulic acid, (2) beta-carotene, curcumin and alpha-tocopherol, (3) chlorogenic acid, curcumin, alpha-tocopherol, anethole and eugenol, and (4) beta-carotene, curcumin, ellagic acid and chlorogenic acid were used in this study. Before the genotoxin was injected ip, identical groups of mice were orally administered either vehicle control, coffee, dietary constituents, or coffee plus dietary constituents. Co-administration of coffee with the dietary constituents enhanced the anti-genotoxic effect compared with that of either coffee or the dietary constituents alone. Two-factor analysis of variance of the data suggests that there is a significant synergistic interaction between coffee and the dietary constituents for anti-genotoxic effects against MNNG (combination 1 and 2) and URE (combination 4).

CC 04300 LIPIDS & RELATED COMPOUNDS; 04800 **VITAMINS**; 10100 TOXICOLOGY-GENERAL; 10200 TOXICOLOGY-PREVENTION & ANTIDOTES; 15100 BLOOD & RELATED TOPICS; 20100 NUTRITION; 20200 DIETARY STUDIES; 40100 FOOD SCIENCE-GENERAL; 45300. . .

RN 50-07-7 (MITOMYCIN C)  
50-18-0 (CYCLOPHOSPHAMIDE)  
51-79-6 (URETHANE)  
59-02-9 (.ALPHA.-TOCOPHEROL)  
97-53-0 (EUGENOL)  
104-46-1 (ANETHOLE)  
327-97-9 (CHLOROGENIC ACID)  
331-39-5 (CAFFEIC ACID)  
458-37-7 (CURCUMIN)  
476-66-4 (ELLAGIC ACID)  
759-73-9 (N-NITROSO-N-ETHYLUREA)  
1135-24-6 (FERULIC ACID)  
7235-40-7 (.BETA.-CAROTENE)

L8 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2002:615347 CAPLUS  
DOCUMENT NUMBER: 137:139730  
TITLE: Nutraceuticals and methods of obtaining nutraceuticals  
from tropical crops  
INVENTOR(S): Miljkovic, Dusan; Bignami, Gary S.  
PATENT ASSIGNEE(S): Science and Technology International, USA  
SOURCE: PCT Int. Appl., 24 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2002062159	A1	20020815	WO 2002-US203261	20020205
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2001-266716P P 20010206

AB Various novel therapeutic and nutrient compns. contg. relatively high levels of health-enhancing substances are obtained by novel extn. processes from the byproducts of tropical crops. The topical crop is selected from the group consisting of coffee, macadamia, pineapple, taro, papaya, and mango. The ext. is comprised of a substance selected from the group consisting of carbohydrate, sugar, fat, protein, amino acid, vitamin, antioxidant, polyphenol, caffeic acid, ferulic acid, and chlorogenic acid.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Amino acids, biological studies  
Carbohydrates, biological studies  
Fats and Glyceridic oils, biological studies  
Proteins

**Vitamins**

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(extn. of nutraceuticals from tropical crops)

IT 327-97-9, Chlorogenic acid 1135-24-6, Ferulic acid  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(extn. of nutraceutical from tropical crops)

IT 331-39-5, Caffeic acid  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(extn. of nutraceuticals from tropical crops)

L8 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:315203 CAPLUS

DOCUMENT NUMBER: 136:324567

TITLE: Integrated wine quality sensor

INVENTOR(S): Trauner, Kenneth B.; Weber, Paul J.; Rubenchik, Alexander M.; Da Silva, Luiz B.

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002033404	A2	20020425	WO 2001-US32547	20011018
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002011799	A5	20020429	AU 2002-11799	20011018

PRIORITY APPLN. INFO.:

US 2000-693084 A 20001019

WO 2001-US32547 W 20011018

AB A device is described that can be easily used to evaluate the condition and state of wine while still in the bottle. The device consists of a hand-held device that connects to a sensor package on the wine bottle. Optical and/or electrochem. measurements are used to measure specific properties important to the taste and quality of the wine.

IT Alcohols, analysis  
Amino acids, analysis  
Anthocyanins  
Borates  
Carbohydrates, analysis  
Carboxylic acids, analysis  
Disulfides  
Esters, analysis  
Fatty acids, analysis  
Flavonoids  
Glycosides  
Halogens  
Heavy metals  
Mineral elements, analysis  
Nitrates, analysis  
Phenols, analysis  
Polysaccharides, analysis  
Proteins  
Quinones  
Silicates, analysis  
Tannins  
Terpenes, analysis  
Thiols (organic), analysis  
Trace elements, analysis

**Vitamins**

RL: ANT (Analyte); ANST (Analytical study)  
(integrated wine quality sensor)

IT 50-21-5, Lactic acid, analysis 51-45-6, Histamine, analysis 51-67-2, Tyramine 51-79-6, Ethyl carbamate 56-81-5, Glycerol, analysis 57-13-6, Urea, analysis 58-85-5, Biotin 60-12-8, 2-Phenylethanol 62-49-7, Choline 64-17-5, Ethanol, analysis 64-18-6, Formic acid, analysis 64-19-7, Acetic acid, analysis 64-19-7D, Acetic acid, esters 65-85-0, Benzoic acid, analysis 67-56-1, Methanol, analysis 67-63-0, Isopropanol, analysis 67-68-5, Dimethyl sulfoxide, analysis 69-65-8, Mannitol 69-72-7, Salicylic acid, analysis 70-18-8, Glutathione, analysis 71-23-8, 1-Propanol, analysis 71-36-3, 1-Butanol, analysis 71-41-0, n-Amyl alcohol, analysis 74-93-1, Methanethiol, analysis 75-07-0, Acetaldehyde, analysis 75-08-1, Ethanethiol 75-15-0, Carbon disulfide, analysis 75-18-3, Dimethyl sulfide 76-03-9, Trichloroacetic acid, analysis 77-92-9, Citric acid, analysis 78-83-1, Isobutanol, analysis 79-31-2, Isobutyric acid 80-71-7, Cyclotene 87-25-2, Ethyl anthranilate 87-40-1, 2,4,6-Trichloroanisole 87-69-4, Tartaric acid 87-99-0, Xylitol 89-86-1 90-05-1, Guaiacol 97-64-3, Ethyl lactate 98-00-0, Furfuryl alcohol 98-01-1, Furfural, analysis 99-96-7, p-Hydroxybenzoic acid, analysis 100-42-5, Vinyl benzene, analysis 100-52-7, Benzaldehyde, analysis 101-97-3, Ethyl phenyl acetate 103-45-7 104-61-0, .gamma.-Nonalactone 105-37-3, Ethyl propionate 106-32-1, Ethyl caprylate 107-92-6, Butyric acid, analysis 107-92-6D, Butyric acid, esters 108-21-4, Isopropyl acetate 108-95-2, Phenol, analysis 109-60-4, Propyl acetate 109-94-4, Ethyl formate 110-15-6, Succinic acid, analysis 110-17-8, Fumaric acid, analysis 110-19-0, Isobutyl acetate 110-38-3, Ethyl caprate 110-44-1, Sorbic acid 110-60-1, Putrescine 110-81-6, Diethyl disulfide 111-27-3, 1-Hexanol, analysis 118-61-6, Ethyl salicylate 118-71-8, Maltol 119-36-8, Methyl salicylate 120-80-9, Catechin, analysis 121-33-5, Vanillin 121-34-6, Vanillic acid 123-25-1, Ethyl succinate 123-51-3 123-66-0,

Ethyl caproate 123-92-2, Isoamyl acetate 124-07-2, Octanoic acid, analysis 127-17-3, Pyruvic acid, analysis 134-01-0, Peonidin 134-04-3, Pelargonidin 134-20-3 134-96-3, Syringaldehyde 137-00-8, 5-Hydroxyethyl-4-methylthiazole 137-32-6 141-78-6, Ethyl acetate, analysis 142-62-1, Hexanoic acid, analysis 144-62-7, Oxalic acid, analysis 149-32-6, Erythritol 149-91-7, Gallic acid, analysis 154-23-4, Catechin 290-37-9D, Pyrazine, derivs. 303-38-8, o-Pyrocatechuic acid 327-97-9, Chlorogenic acid 328-50-7, .alpha.-Ketoglutaric acid 331-39-5, Caffeic acid 352-93-2, Diethyl sulfide 431-03-8, Diacetyl 458-36-6, Coniferylaldehyde 462-94-2, Cadaverine 471-34-1, Calcium carbonate, analysis 476-66-4, Ellagic acid 490-46-0, Epicatechin 490-79-9, Gentisic acid 505-10-2, Methionol 513-85-9, 2,3-Butanediol 513-86-0, Acetoin 528-53-0, Delphinidin 528-58-5, Cyanidin 530-57-4, Syringic acid 530-59-6, Sinapic acid 532-32-1, Sodium benzoate 536-08-3, Digallic acid 539-82-2, Ethyl valerate 577-85-5, 3-Flavonol 590-55-6, Carbamyl phosphate 621-82-9, Cinnamic acid, analysis 623-70-1 624-92-0, Dimethyl disulfide 625-60-5, Ethyl thiolacetate 643-84-5, Malvidin 685-73-4, Galacturonic acid 868-14-4, Potassium bitartrate 918-04-7 928-95-0, trans-2-Hexen-1-ol 1044-65-1 **1135-24-6**, Ferulic acid 1429-30-7, Petunidin 1487-49-6, Methyl 3-hydroxybutanoate 1534-08-3 1609-47-8, Diethyl dicarbonate 2152-56-9, Arabitol 2305-25-1, Ethyl 3-hydroxyhexanoate 2371-42-8, 2-Methylisoborneol 2396-84-1, Ethyl sorbate 2545-00-8, Afzelechin 3025-30-7 3164-34-9, Calcium tartrate 3391-86-4, 1-Octen-3-ol 3658-77-3, Furaneol 4077-47-8 4206-58-0, Sinapaldehyde 4312-99-6, 1-Octen-3-one 4525-33-1, Dimethyl dicarbonate 5023-02-9, Flavan-3,4-diol 5127-64-0, Gallocatechin gallate 5405-41-4, Ethyl 3-hydroxybutanoate 5451-71-8, 2-Methoxyethyl benzoate 5466-06-8, Ethyl 3-mercaptopropanoate 6915-15-7, Malic acid 7228-78-6, Malvidin 3-glucoside 7328-34-9 7400-08-0, p-Coumaric acid 7429-90-5, Aluminum, analysis 7439-89-6, Iron, analysis 7439-92-1, Lead, analysis 7439-93-2, Lithium, analysis 7439-95-4, Magnesium, analysis 7439-96-5, Manganese, analysis 7440-02-0, Nickel, analysis 7440-09-7, Potassium, analysis 7440-17-7, Rubidium, analysis 7440-21-3, Silicon, analysis 7440-23-5, Sodium, analysis 7440-38-2, Arsenic, analysis 7440-42-8, Boron, analysis 7440-50-8, Copper, analysis 7440-66-6, Zinc, analysis 7440-70-2, Calcium, analysis 7446-09-5, Sulfur dioxide, analysis 7553-56-2, Iodine, analysis 7726-95-6, Bromine, analysis 7782-41-4, Fluorine, analysis 7782-50-5, Chlorine, analysis 7783-06-4, Hydrogen sulfide, analysis 7783-28-0, Diammonium phosphate 9002-10-2, Polyphenoloxidase 9005-53-2, Lignin, analysis 9037-55-2, Galactan 11078-27-6, Arabinan 13465-07-1, Hydrogen disulfide 14051-53-7, Flavylum 14265-44-2, Phosphate, analysis 14808-79-8, Sulfate, analysis 19700-21-1, Geosmin 20315-25-7, Procyanidin B1 20819-16-3, Catechin gallate 23567-23-9, Procyanidin B3 23726-93-4, Damascenone 25429-38-3D, Hydroxycinnamic acid, esters 27174-07-8, Coumaric acid 28290-88-2 28380-08-7, Ethyl trans,cis-2,6-dodecadienoate 29106-49-8, Procyanidin B2 30364-38-6, 1,1,6-Trimethyl-1,2-dihydronaphthalene 56752-55-7, 2-Ethoxyhexa-3,5-diene 62614-75-9 62614-77-1 64846-50-0, Methoxymethyl benzoate 65416-59-3, Vitispirane 67879-58-7, Caftaric acid 80498-15-3, Laccase 107335-23-9  
 RL: ANT (Analyte); ANST (Analytical study)  
 (integrated wine quality sensor)

L8 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:519341 CAPLUS

DOCUMENT NUMBER: 135:91861

TITLE: Method of preparing and using isoflavones

INVENTOR(S): Empie, Mark; Gugger, Eric

PATENT ASSIGNEE(S): Archer Daniels Midland Co., USA

SOURCE: U.S., 8 pp., Cont.-in-part of U.S. 6,033,714.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6261565	B1	20010717	US 1998-162038	19980928
US 5702752	A	19971230	US 1996-614545	19960313
IL 130611	A1	20010430	IL 1997-130611	19970310
US 5792503	A	19980811	US 1997-868629	19970604
US 6033714	A	20000307	US 1998-35588	19980305
AU 9887879	A1	19990422	AU 1998-87879	19981001
AU 748832	B2	20020613		
ZA 9808962	A	19990913	ZA 1998-8962	19981001
EP 906761	A2	19990407	EP 1998-308060	19981002
EP 906761	A3	19990519		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 11221048	A2	19990817	JP 1998-296187	19981002
US 6391308	B1	20020521	US 2000-615239	20000713
US 6391309	B1	20020521	US 2000-615240	20000713
US 6391310	B1	20020521	US 2000-616205	20000713
US 6395279	B1	20020528	US 2000-616150	20000713
US 6399072	B1	20020604	US 2000-615152	20000713

PRIORITY APPLN. INFO.:

US 1996-614545	A3	19960313
US 1997-868629	A2	19970604
US 1997-60549P	P	19971002
US 1998-35588	A2	19980305
IL 1997-120409	A3	19970310
US 1998-162038	A	19980928

AB The invention provides for a refinement of phytochems. in order to tailor the refined end product to particular human dietary needs. More particularly, a compn. is prepd. by extg. phytochems. from plant matter. This compn. is enriched preferably in two or more isoflavones, lignans, saponins, catechins and phenolic acids. Soy is the preferred source of these chems.; however, other plants may also be used, such as red clover, kudzu, flax, and cocoa. The compn. is a dietary supplement for treatment of various cancers, pre-and-post-menstrual syndromes, and various other disorders.

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Mineral elements, biological studies

#### Vitamins

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (isoflavone prepg. method and use)

IT 69-72-7, Salicylic acid, biological studies 121-34-6, Vanillic acid  
 149-91-7, Gallic acid, biological studies 156-38-7 327-97-9,  
 Chlorogenic acid 331-39-5, Caffeic acid 446-72-0, Genistein  
 465-99-6, Hederagenin 485-72-3, Formononetin 486-66-8, Daidzein  
 487-36-5, Pinoresinol 490-46-0, Epicatechin 490-79-9 491-80-5,  
 Biochanin A 500-38-9, Nordihydroguaiaretic acid 508-01-0,  
 Soyasapogenol A 530-57-4, Syringic acid 530-59-6, Sinapic acid  
 548-29-8, Isolariciresinol 580-72-3, Matairesinol 595-14-2,  
 Soyasapogenol C 595-15-3, Soyasapogenol B 599-07-5, Medicagenic acid  
 621-82-9, Cinnamic acid, biological studies 970-73-0, Gallocatechin  
 970-74-1, Epigallocatechin 1135-24-6, Ferulic acid 1393-03-9,  
 Quillaja saponin 1405-86-3, Glycyrrhizin 2955-23-9, Olivil  
 6750-59-0, Soyasapogenol E 11024-24-1, Digitonin 17406-45-0, Tomatine  
 25429-38-3, Coumaric acid 27003-73-2, Lariciresinol 29388-59-8,  
 Secoisolariciresinol 29656-58-4, Hydroxybenzoic acid 40957-83-3,  
 Glycitein 56283-67-1, Lucernic acid 65892-76-4, Soyasapogenol D  
 84161-89-7, Zanhic acid 104033-83-2, Soyasapogenol F  
 RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological

study); USES (Uses)  
(isoflavone prepg. method and use)

L8 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:241997 CAPLUS  
DOCUMENT NUMBER: 130:287063  
TITLE: Method of preparing and using phytochemicals  
INVENTOR(S): Empie, Mark; Gugger, Eric  
PATENT ASSIGNEE(S): Archer Daniels Midland Company, USA  
SOURCE: Eur. Pat. Appl., 12 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 5  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 906761	A2	19990407	EP 1998-308060	19981002
EP 906761	A3	19990519		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6261565	B1	20010717	US 1998-162038	19980928
ZA 9808962	A	19990913	ZA 1998-8962	19981001
PRIORITY APPLN. INFO.:				
			US 1997-60549P	P 19971002
			US 1998-162038	P 19980928
			US 1996-614545	A3 19960313
			US 1997-868629	A2 19970604
			US 1998-35588	A2 19980305

AB A compn. is prepd. by extg. phytochems. from plant matter. This compn. is enriched preferably in isoflavones, lignans, saponins, catechins and phenolic acids. Soy is the preferred source of these chems.; however, other plants may also be used, such as red clover, kudzu, flax, and cocoa. The compn. is a dietary supplement for treatment of various cancers, pre- and post-menstrual syndromes, and various other disorders.

IT Flavanols  
Ginsenosides  
Lignans  
Mineral elements, biological studies  
Saponins

**Vitamins**

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method of prepg. and dietary use of phytochems.)

IT 50-70-4, Sorbitol, biological studies 63-42-3, Lactose 69-72-7, Salicylic acid, biological studies 120-80-9, Catechin, biological studies 121-34-6, Vanillic acid 149-91-7, Gallic acid, biological studies 156-38-7 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid 446-72-0, Genistein 465-99-6, Hederagenin 485-72-3, Formononetin 486-66-8, Daidzein 487-36-5, Pinoresinol 490-46-0, Epicatechin 490-79-9, Gentisic acid 491-80-5, Biochanin A 500-38-9, Nordihydroguaiaretic acid 508-01-0, Soyasapogenol A 529-59-9, Genistin 530-57-4, Syringic acid 530-59-6, Sinapic acid 548-29-8, Isolariciresinol 552-66-9, Daidzin 557-04-0, Magnesium stearate 580-72-3, Matairesinol 595-14-2, Soyasapogenol C 595-15-3, Soyasapogenol B 599-07-5, Medicagenic acid 621-82-9, Cinnamic acid, biological studies 970-73-0, Gallocatechin 970-74-1, Epigallocatechin 1135-24-6, Ferulic acid 1393-03-9 1405-86-3D, Glycyrrhizin, reaction with digitonin 2955-23-9, Olivil 6750-59-0, Soyasapogenol E 7440-70-2D, Calcium, compds., biological studies 7693-13-2, Calcium citrate 7757-93-9, Dicalcium phosphate 9004-34-6, Cellulose, biological studies 11024-24-1D, Digitonin, reaction with glycyrrhizin 17406-45-0, Tomatine 17482-42-7, Calcium malate 25429-38-3, Coumaric



acid 27003-73-2, Lariciresinol 29388-59-8, Secoisolariciresinol  
29656-58-4, Hydroxybenzoic acid 40957-83-3, Glycitein 56283-67-1,  
Lucernic acid 65892-76-4, Soyasapogenol D 84161-89-7, Zanhic acid  
104033-83-2, Soyasapogenol F

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological  
study); USES (Uses)

(method of prepg. and dietary use of phytochems.)

L8 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:710394 CAPLUS

DOCUMENT NUMBER: 125:317396

TITLE: Selective condition inhibitory agents and methods for  
treating conditions associated with excess nitric  
oxide

INVENTOR(S): Defeudis, Francis V.

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9630012	A1	19961003	WO 1996-US3755	19960321
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI			
RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML			
AU 9653172	A1	19961016	AU 1996-53172	19960321
PRIORITY APPLN. INFO.:			US 1995-411247	19950324
			US 1995-423829	19950419
			WO 1996-US3755	19960321

OTHER SOURCE(S): MARPAT 125:317396

AB A selective condition inhibitory agent is used for the prophylactic and/or therapeutic treatment of conditions assocd. with excess nitric oxide (NO). Methods are provided for using the selective condition inhibitory agent to treat conditions assocd. with excess NO. The invention is based, at least in part, on the discovery that selective condition inhibitory agents treat conditions assocd. with excess NO, e.g., that level of NO that exists in the subject in excess of that amt. necessary to maintain health and which is endogenously derived and/or exogenously acquired. The invention provides for the use of selective inhibitory agents, e.g., agents that selectively inhibit the actions and metabolic transformations of excess amts. of endogenously-derived and/or exogenously-acquired NO, for prophylactic and/or therapeutic treatments of a variety of conditions, e.g., atherogenesis, restenosis, hyperplasia, inflammation, and neurodegenerative disorders. The selective condition inhibitory agents may be antioxidants, NO trappers, nitrate scavengers nitrite scavengers, or reductants.

IT Flavonoids

Phosphates, biological studies

Tannins

Tocopherols

**Vitamins**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(selective condition inhibitory agents and methods for treating  
conditions assocd. with excess nitric oxide)

IT 50-81-7D, Ascorbic acid, derivs. 52-90-4, Cysteine, biological studies  
65-85-0D, Benzoic acid, esters 69-65-8, Mannitol 70-18-8, Glutathione,

biological studies 84-60-6, Anthraflavic acid 91-53-2, Ethoxyquin 94-13-3, Propylparaben 97-53-0, Eugenol 100-63-0, Phenylhydrazine 117-39-5, Quercetin 120-80-9, Catechol, biological studies 123-31-9, Hydroquinone, biological studies 128-37-0, Butylated hydroxytoluene, biological studies 137-66-6 149-91-7, Gallic acid, biological studies 149-91-7D, Gallic acid, esters 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid 476-66-4, Ellagic acid 500-38-9, Nordihydroguaiaretic acid 520-26-3, Hesperidin 529-44-2, Myricetin 531-75-9, Esculin 592-88-1, Diallyl sulfide 592-88-1D, Diallyl sulfide, derivs. 1135-24-6, Ferulic acid 1406-18-4D, Vitamin E, phosphate diesters 1948-33-0, tert-Butylhydroquinone 9001-05-2, Catalase 9013-66-5, Reduced glutathione peroxidase 9054-89-1, Superoxide dismutase 23288-49-5, Probucol 25013-16-5, Butylated hydroxyanisole 98829-12-0, 2-O-Octadecylascorbic acid  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (selective condition inhibitory agents and methods for treating conditions assocd. with excess nitric oxide)

L8 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:338755 CAPLUS

DOCUMENT NUMBER: 122:150993

TITLE: Evaluation of chemopreventive agents in different mechanistic classes [by] using a rat tracheal epithelial cell culture transformation assay

AUTHOR(S): Arnold, Julia T.; Wilkinson, Betty P.; Sharma, Sheela; Steele, Vernon E.

CORPORATE SOURCE: Cellular and Molecular Toxicology Program, ManTech Environmental Technology, Research Triangle Park, NC, 27709, USA

SOURCE: Cancer Research (1995), 55(3), 537-43

CODEN: CNREA8; ISSN: 0008-5472

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The rat tracheal epithelial (RTE) cell focus inhibition assay was used to identify potential anticarcinogenic agents. Ninety-nine compds. were evaluated for their ability to inhibit benzo[a]pyrene-induced transformation of RTE cells. Freshly isolated RTE cells were exposed to benzo[a]pyrene alone or in combination with a substance to be tested. After 30 days in culture, transformed foci were scored and inhibition was quantitated. Foci formation was inhibited mainly by agents which modulate the initiation of carcinogenesis by altering drug-metabolizing enzymes, inhibiting the binding of benzo[a]pyrene to DNA, enhancing detoxification of activated carcinogens, or by inducing epithelial cell differentiation. Such agents include antioxidants, free-radical scavengers, glutathione S-transferase enhancers, **vitamins**, retinoids, and SH compds. Agents which inhibit ornithine decarboxylase and arachidonic acid metab. were not as effective. The RTE assay provides important data for compd. selection prior to whole-animal-screening assays in the development of carcinogenesis-inhibiting drugs.

AB The rat tracheal epithelial (RTE) cell focus inhibition assay was used to identify potential anticarcinogenic agents. Ninety-nine compds. were evaluated for their ability to inhibit benzo[a]pyrene-induced transformation of RTE cells. Freshly isolated RTE cells were exposed to benzo[a]pyrene alone or in combination with a substance to be tested. After 30 days in culture, transformed foci were scored and inhibition was quantitated. Foci formation was inhibited mainly by agents which modulate the initiation of carcinogenesis by altering drug-metabolizing enzymes, inhibiting the binding of benzo[a]pyrene to DNA, enhancing detoxification of activated carcinogens, or by inducing epithelial cell differentiation. Such agents include antioxidants, free-radical scavengers, glutathione S-transferase enhancers, **vitamins**, retinoids, and SH compds. Agents which inhibit ornithine decarboxylase and arachidonic acid metab.

were not as effective. The RTE assay provides important data for compd. selection prior to whole-animal-screening assays in the development of carcinogenesis-inhibiting drugs.

IT Mercapto compounds

Retinoids

Vitamins

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(screening of drugs for inhibiting carcinogenesis by using rat tracheal epithelial cell culture)

IT 50-78-2, Acetylsalicylic acid 52-53-9, Verapamil 53-43-0, Dehydroepiandrosterone 53-86-1, Indomethacin 56-40-6, Glycine, biological studies 57-55-6, Propylene glycol, biological studies 58-27-5, Vitamin K3 58-73-1, Diphenhydramine 58-93-5, Hydrochlorothiazide 59-30-3, Folic acid, biological studies 59-51-8, DL-Methionine 59-67-6, Nicotinic acid, biological studies 60-23-1, Cysteamine 60-54-8, Tetracycline 60-82-2, Phloretin 60-87-7, Promethazine 61-73-4, Methylene blue 62-46-4, Thiocetic acid 69-65-8, D-Mannitol 69-93-2, Uric acid, biological studies 73-31-4, Melatonin 74-79-3, Arginine, biological studies 77-52-1, Ursolic acid 79-63-0, Lanosterol 83-46-5, .beta.-Sitosterol 83-86-3, Inositol hexaphosphate 83-89-6, Quinacrine 87-11-6, Thiolutin 99-73-0, p-Bromophenacyl bromide 110-17-8, Fumaric acid, biological studies 121-32-4, Ethylvanillin 121-33-5, Vanillin 121-79-9, Propyl gallate 129-46-4, Sodium suramin 137-66-6, Ascorbyl palmitate 141-84-4, 2-Thioxo-4-thiazolidinone 146-17-8, Riboflavin 5'-phosphate 150-13-0, p-Aminobenzoic acid 150-76-5, p-Methoxyphenol 155-58-8, Rhapontin 305-84-0, Carnosine **327-97-9**, Chlorogenic acid **331-39-5**, Caffeic acid 458-37-7, Curcumin 471-53-4, .alpha.-Glycyrrhetic acid 471-80-7, Steviol 479-61-8 480-16-0, Morin 486-12-4, Triprolidine 520-36-5, Apigenin 529-44-2, Myricetin 532-11-6, Anethole trithione 569-65-3, Meclizine 592-88-1, Diallyl sulfide 599-79-1, Sulfasalazine 622-78-6, Benzyl isothiocyanate 624-49-7, Dimethyl fumarate **1135-24-6**, Ferulic acid 1191-85-1, ETYA 1449-05-4, .beta.-Glycyrrhetic acid 2050-87-5, Diallyl trisulfide 2179-58-0, Allyl methyl disulfide 2257-09-2, Phenethylisothiocyanate 2609-46-3, Amiloride 3766-08-3, DL-Palmitoylcarnitine 5697-56-3, Carbenoxolone 6385-02-0, Sodium meclofenamate 7235-40-7, .beta.-Carotene 7631-95-0, Sodium molybdate 7772-98-7, Sodium thiosulfate 8050-81-5, Simethicone 9003-39-8, Polyvinylpyrrolidone 10102-18-8, Sodium selenite 11103-57-4, Vitamin A 15826-37-6, Sodium cromolyn 17407-37-3, .alpha.-Tocopherol succinate 22916-47-8, Miconazole 25496-72-4, Glycerol monooleate 34135-85-8, Allyl methyl trisulfide 38194-50-2, Sulindac 52942-31-1, Etoposide 55268-74-1, Praziquantel 57455-81-9, MAK 5 64224-21-1, Oltipraz 65595-90-6, N-(6-Aminoethyl)-5-chloro-1-naphthalenesulfonamide 75330-75-5, Lovastatin 75775-33-6, Purpurin 79331-86-5, MAK 4 91531-30-5, Antineoplaston A10 92285-01-3, Ajoene 110683-02-8 160371-97-1, BASF 47851 160372-07-6, Ro 16-9100 160372-08-7, Ro 19-2968 161279-28-3, BASF 47848 161279-29-4, BASF 47850 161279-30-7, BASF 51328  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(screening of drugs for inhibiting carcinogenesis by using rat tracheal epithelial cell culture)

L8 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:78318 CAPLUS

DOCUMENT NUMBER: 116:78318

TITLE: Action of beer and its ingredients on gastric acid secretion and release of gastrin in humans

AUTHOR(S): Singer, Manfred V.; Teyssen, Stephan; Eysselein,

Viktor E.  
CORPORATE SOURCE: Dep. Med., Univ. Essen, Essen, Germany  
SOURCE: Gastroenterology (1991), 101(4), 935-42  
CODEN: GASTAB; ISSN: 0016-5085  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The intragastric action of beer and its known ingredients before and after  
fermn. on gastric acid secretion and release of gastrin was studied in  
healthy humans. None of 11 tested ingredients of fermented beer (2  
.times. 500 mL, pH 5.5, given either alone or in combination) or hop ext.  
had any significant effect. Finished beer (6 wk old) and new beer were  
potent stimuli of acid output, causing 93% and 76% of the incremental  
maximal acid output in response to pentagastrin (6 .mu.g/kg SC), resp.  
Before the addn. of yeast, preproducts of beer were considerably less  
potent. Thus, first and finished wort caused only a minor acid response  
which was 48% and 46% of maximal acid output. Foreign fermn. in first and  
finished wort is presumably the reason for the stimulatory action because  
glucose solns. in concns. (11.5% wt/vol) seen in wort did not stimulate  
acid secretion. However, glucose solns. to which yeast was added,  
resulting in fermn., were as potent stimuli of acid secretion as beer.  
Lyophilization of beer at pH 11.0 and dialysis (cutoff mol wt, 1000)  
removed the stimulatory substances. The plasma gastrin responses  
paralleled the gastric acid response to the different stimulants. It was  
concluded that (a) the addn. of yeast to finished wort and the following  
alc. fermn. are the essential steps for the stimulatory action of beer on  
gastric acid secretion and release of gastrin; (b) carbohydrate  
metabolites with a mol. wt. of less than 1000 are the acid-stimulatory  
agents in fermented beer; and (c) gastrin is the mediator of the  
stimulation of acid secretion because all substances that had a potent  
acid-stimulatory action also were potent stimuli of gastrin release.

IT Bitter principles  
Electrolytes  
Amines, biological studies  
Amino acids, biological studies  
Carboxylic acids, biological studies  
Flavonoids

**Vitamins**

RL: BIOL (Biological study)  
(of beer, gastric acid secretion and gastrin release in human response  
to)

IT 50-89-5, Thymidine, biological studies 51-45-6, Histamine, biological  
studies 51-67-2 52-90-4, L-Cysteine, biological studies 56-40-6,  
Glycine, biological studies 56-41-7, L-Alanine, biological studies  
56-45-1, L-Serine, biological studies 56-84-8, L-Aspartic acid,  
biological studies 56-86-0, L-Glutamic acid, biological studies  
56-87-1, L-Lysine, biological studies 58-61-7, Adenosine, biological  
studies 58-63-9, Inosine 58-85-5, Biotin 58-96-8, Uridine 59-43-8,  
Thiamin, biological studies 59-67-6, Nicotinic acid, biological studies  
60-18-4, L-Tyrosine, biological studies 61-90-5, L-Leucine, biological  
studies 63-68-3, L-Methionine, biological studies 63-91-2,  
L-Phenylalanine, biological studies 64-17-5, Ethanol, biological studies  
64-19-7, Acetic acid, biological studies 65-23-6, Pyridoxin 65-46-3,  
Cytidine 66-22-8, Uracil, biological studies 68-94-0, Hypoxanthine  
69-89-6, Xanthine 71-00-1, L-Histidine, biological studies 71-30-7,  
Cytosine 72-18-4, L-Valine, biological studies 72-19-5, L-Threonine,  
biological studies 73-22-3, L-Tryptophan, biological studies 73-24-5,  
Adenine, biological studies 73-32-5, L-Isoleucine, biological studies  
73-40-5, Guanine 74-79-3, L-Arginine, biological studies 77-92-9,  
Citric acid, biological studies 83-88-5, Riboflavin, biological studies  
110-60-1, Putrescine 118-00-3, Guanosine, biological studies 127-17-3,  
Pyruvic acid, biological studies 147-85-3, L-Proline, biological studies  
149-91-7, Gallic acid, biological studies 153-18-4, Rutin 154-23-4,  
Catechin 327-97-9, Chlorogenic acid 331-39-5

490-46-0, Epicatechin 520-18-3 522-12-3 526-95-4, Gluconic acid  
 529-44-2 530-59-6 598-82-3, DL-Lactic acid, biological studies  
 617-48-1, DL-Malic acid **1135-24-6** 7400-08-0, p-Cumaric acid  
 7439-95-4, Magnesium, biological studies 7440-70-2, Calcium, biological  
 studies 138932-10-2, Hemipanthothenic acid 138932-92-0, Zol acid  
 RL: BIOL (Biological study)  
 (of beer, gastric acid secretion and gastrin release in human response  
 to)

L8 ANSWER 10 OF 19 CA COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 137:139730 CA  
 TITLE: Nutraceuticals and methods of obtaining nutraceuticals  
 from tropical crops  
 INVENTOR(S): Miljkovic, Dusan; Bignami, Gary S.  
 PATENT ASSIGNEE(S): Science and Technology International, USA  
 SOURCE: PCT Int. Appl., 24 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002062159	A1	20020815	WO 2002-US203261	20020205
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2001-266716P P 20010206  
 AB Various novel therapeutic and nutrient compns. contg. relatively high  
 levels of health-enhancing substances are obtained by novel extn.  
 processes from the byproducts of tropical crops. The topical crop is  
 selected from the group consisting of coffee, macadamia, pineapple, taro,  
 papaya, and mango. The ext. is comprised of a substance selected from the  
 group consisting of carbohydrate, sugar, fat, protein, amino acid,  
 vitamin, antioxidant, polyphenol, caffeic acid, ferulic acid, and  
 chlorogenic acid.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Amino acids, biological studies  
 Carbohydrates, biological studies  
 Fats and Glyceridic oils, biological studies  
 Proteins  
**Vitamins**  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (extn. of nutraceuticals from tropical crops)  
 IT **327-97-9**, Chlorogenic acid **1135-24-6**, Ferulic acid  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (extn. of nutraceutical from tropical crops)  
 IT **331-39-5**, Caffeic acid  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (extn. of nutraceuticals from tropical crops)

L8 ANSWER 11 OF 19 CA COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 136:324567 CA  
 TITLE: Integrated wine quality sensor  
 INVENTOR(S): Trauner, Kenneth B.; Weber, Paul J.; Rubenchik,

Alexander M.; Da Silva, Luiz B.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002033404	A2	20020425	WO 2001-US32547	20011018
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002011799	A5	20020429	AU 2002-11799	20011018
PRIORITY APPLN. INFO.:			US 2000-693084	A 20001019
			WO 2001-US32547	W 20011018
AB	A device is described that can be easily used to evaluate the condition and state of wine while still in the bottle. The device consists of a hand-held device that connects to a sensor package on the wine bottle. Optical and/or electrochem. measurements are used to measure specific properties important to the taste and quality of the wine.			
IT	Alcohols, analysis Amino acids, analysis Anthocyanins Borates Carbohydrates, analysis Carboxylic acids, analysis Disulfides Esters, analysis Fatty acids, analysis Flavonoids Glycosides Halogens Heavy metals Mineral elements, analysis Nitrates, analysis Phenols, analysis Polysaccharides, analysis Proteins Quinones Silicates, analysis Tannins Terpenes, analysis Thiols (organic), analysis Trace elements, analysis <b>Vitamins</b> RL: ANT (Analyte); ANST (Analytical study) (integrated wine quality sensor)			
IT	50-21-5, Lactic acid, analysis 51-45-6, Histamine, analysis 51-67-2, Tyramine 51-79-6, Ethyl carbamate 56-81-5, Glycerol, analysis 57-13-6, Urea, analysis 58-85-5, Biotin 60-12-8, 2-Phenylethanol 62-49-7, Choline 64-17-5, Ethanol, analysis 64-18-6, Formic acid, analysis 64-19-7, Acetic acid, analysis 64-19-7D, Acetic acid, esters 65-85-0, Benzoic acid, analysis 67-56-1, Methanol, analysis 67-63-0, Isopropanol, analysis 67-68-5, Dimethyl sulfoxide, analysis 69-65-8,			

Mannitol 69-72-7, Salicylic acid, analysis 70-18-8, Glutathione, analysis 71-23-8, 1-Propanol, analysis 71-36-3, 1-Butanol, analysis 71-41-0, n-Amyl alcohol, analysis 74-93-1, Methanethiol, analysis 75-07-0, Acetaldehyde, analysis 75-08-1, Ethanethiol 75-15-0, Carbon disulfide, analysis 75-18-3, Dimethyl sulfide 76-03-9, Trichloroacetic acid, analysis 77-92-9, Citric acid, analysis 78-83-1, Isobutanol, analysis 79-31-2, Isobutyric acid 80-71-7, Cyclotene 87-25-2, Ethyl anthranilate 87-40-1, 2,4,6-Trichloroanisole 87-69-4, Tartaric acid 87-99-0, Xylitol 89-86-1 90-05-1, Guaiacol 97-64-3, Ethyl lactate 98-00-0, Furfuryl alcohol 98-01-1, Furfural, analysis 99-96-7, p-Hydroxybenzoic acid, analysis 100-42-5, Vinyl benzene, analysis 100-52-7, Benzaldehyde, analysis 101-97-3, Ethyl phenyl acetate 103-45-7 104-61-0, .gamma.-Nonalactone 105-37-3, Ethyl propionate 106-32-1, Ethyl caprylate 107-92-6, Butyric acid, analysis 107-92-6D, Butyric acid, esters 108-21-4, Isopropyl acetate 108-95-2, Phenol, analysis 109-60-4, Propyl acetate 109-94-4, Ethyl formate 110-15-6, Succinic acid, analysis 110-17-8, Fumaric acid, analysis 110-19-0, Isobutyl acetate 110-38-3, Ethyl caprate 110-44-1, Sorbic acid 110-60-1, Putrescine 110-81-6, Diethyl disulfide 111-27-3, 1-Hexanol, analysis 118-61-6, Ethyl salicylate 118-71-8, Maltol 119-36-8, Methyl salicylate 120-80-9, Catechin, analysis 121-33-5, Vanillin 121-34-6, Vanillic acid 123-25-1, Ethyl succinate 123-51-3 123-66-0, Ethyl caproate 123-92-2, Isoamyl acetate 124-07-2, Octanoic acid, analysis 127-17-3, Pyruvic acid, analysis 134-01-0, Peonidin 134-04-3, Pelargonidin 134-20-3 134-96-3, Syringaldehyde 137-00-8, 5-Hydroxyethyl-4-methylthiazole 137-32-6 141-78-6, Ethyl acetate, analysis 142-62-1, Hexanoic acid, analysis 144-62-7, Oxalic acid, analysis 149-32-6, Erythritol 149-91-7, Gallic acid, analysis 154-23-4, Catechin 290-37-9D, Pyrazine, derivs. 303-38-8, o-Pyrocatechuic acid 327-97-9, Chlorogenic acid 328-50-7, .alpha.-Ketoglutaric acid 331-39-5, Caffeic acid 352-93-2, Diethyl sulfide 431-03-8, Diacetyl 458-36-6, Coniferylaldehyde 462-94-2, Cadaverine 471-34-1, Calcium carbonate, analysis 476-66-4, Ellagic acid 490-46-0, Epicatechin 490-79-9, Gentisic acid 505-10-2, Methionol 513-85-9, 2,3-Butanediol 513-86-0, Acetoin 528-53-0, Delphinidin 528-58-5, Cyanidin 530-57-4, Syringic acid 530-59-6, Sinapic acid 532-32-1, Sodium benzoate 536-08-3, Digallic acid 539-82-2, Ethyl valerate 577-85-5, 3-Flavonol 590-55-6, Carbamyl phosphate 621-82-9, Cinnamic acid, analysis 623-70-1 624-92-0, Dimethyl disulfide 625-60-5, Ethyl thiolacetate 643-84-5, Malvidin 685-73-4, Galacturonic acid 868-14-4, Potassium bitartrate 918-04-7 928-95-0, trans-2-Hexen-1-ol 1044-65-1 1135-24-6, Ferulic acid 1429-30-7, Petunidin 1487-49-6, Methyl 3-hydroxybutanoate 1534-08-3 1609-47-8, Diethyl dicarbonate 2152-56-9, Arabitol 2305-25-1, Ethyl 3-hydroxyhexanoate 2371-42-8, 2-Methylisoborneol 2396-84-1, Ethyl sorbate 2545-00-8, Afzelechin 3025-30-7 3164-34-9, Calcium tartrate 3391-86-4, 1-Octen-3-ol 3658-77-3, Furanol 4077-47-8 4206-58-0, Sinapaldehyde 4312-99-6, 1-Octen-3-one 4525-33-1, Dimethyl dicarbonate 5023-02-9, Flavan-3,4-diol 5127-64-0, Gallocatechin gallate 5405-41-4, Ethyl 3-hydroxybutanoate 5451-71-8, 2-Methoxyethyl benzoate 5466-06-8, Ethyl 3-mercaptopropanoate 6915-15-7, Malic acid 7228-78-6, Malvidin 3-glucoside 7328-34-9 7400-08-0, p-Coumaric acid 7429-90-5, Aluminum, analysis 7439-89-6, Iron, analysis 7439-92-1, Lead, analysis 7439-93-2, Lithium, analysis 7439-95-4, Magnesium, analysis 7439-96-5, Manganese, analysis 7440-02-0, Nickel, analysis 7440-09-7, Potassium, analysis 7440-17-7, Rubidium, analysis 7440-21-3, Silicon, analysis 7440-23-5, Sodium, analysis 7440-38-2, Arsenic, analysis 7440-42-8, Boron, analysis 7440-50-8, Copper, analysis 7440-66-6, Zinc, analysis 7440-70-2, Calcium, analysis 7446-09-5, Sulfur dioxide, analysis 7553-56-2, Iodine, analysis 7726-95-6, Bromine, analysis 7782-41-4, Fluorine, analysis 7782-50-5, Chlorine, analysis 7783-06-4, Hydrogen sulfide, analysis 7783-28-0, Diammonium phosphate 9002-10-2, Polyphenoloxidase 9005-53-2, Lignin, analysis 9037-55-2, Galactan

11078-27-6, Arabinan 13465-07-1, Hydrogen disulfide 14051-53-7,  
 Flavylum 14265-44-2, Phosphate, analysis 14808-79-8, Sulfate,  
 analysis 19700-21-1, Geosmin 20315-25-7, Procyanidin B1 20819-16-3,  
 Catechin gallate 23567-23-9, Procyanidin B3 23726-93-4, Damascenone  
 25429-38-3D, Hydroxycinnamic acid, esters 27174-07-8, Coumaric acid  
 28290-88-2 28380-08-7, Ethyl trans,cis-2,6-dodecadienoate 29106-49-8,  
 Procyanidin B2 30364-38-6, 1,1,6-Trimethyl-1,2-dihydronaphthalene  
 56752-55-7, 2-Ethoxyhexa-3,5-diene 62614-75-9 62614-77-1 64846-50-0,  
 Methoxymethyl benzoate 65416-59-3, Vitispirane 67879-58-7, Caftaric  
 acid 80498-15-3, Laccase 107335-23-9  
 RL: ANT (Analyte); ANST (Analytical study)  
 (integrated wine quality sensor)

L8 ANSWER 12 OF 19 CA COPYRIGHT 2002 ACS

ACCESSION NUMBER: 135:91861 CA  
 TITLE: Method of preparing and using isoflavones  
 INVENTOR(S): Empie, Mark; Gugger, Eric  
 PATENT ASSIGNEE(S): Archer Daniels Midland Co., USA  
 SOURCE: U.S., 8 pp., Cont.-in-part of U.S. 6,033,714.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6261565	B1	20010717	US 1998-162038	19980928
US 5702752	A	19971230	US 1996-614545	19960313
IL 130611	A1	20010430	IL 1997-130611	19970310
US 5792503	A	19980811	US 1997-868629	19970604
US 6033714	A	20000307	US 1998-35588	19980305
AU 9887879	A1	19990422	AU 1998-87879	19981001
AU 748832	B2	20020613		
ZA 9808962	A	19990913	ZA 1998-8962	19981001
EP 906761	A2	19990407	EP 1998-308060	19981002
EP 906761	A3	19990519		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 11221048	A2	19990817	JP 1998-296187	19981002
US 6391308	B1	20020521	US 2000-615239	20000713
US 6391309	B1	20020521	US 2000-615240	20000713
US 6391310	B1	20020521	US 2000-616205	20000713
US 6395279	B1	20020528	US 2000-616150	20000713
US 6399072	B1	20020604	US 2000-615152	20000713

PRIORITY APPLN. INFO.:  
 US 1996-614545 A3 19960313  
 US 1997-868629 A2 19970604  
 US 1997-60549P P 19971002  
 US 1998-35588 A2 19980305  
 IL 1997-120409 A3 19970310  
 US 1998-162038 A 19980928

AB The invention provides for a refinement of phytochemicals in order to tailor the refined end product to particular human dietary needs. More particularly, a compound is prepared by extracting phytochemicals from plant matter. This compound is enriched preferably in two or more isoflavones, lignans, saponins, catechins and phenolic acids. Soy is the preferred source of these chemicals; however, other plants may also be used, such as red clover, kudzu, flax, and cocoa. The compound is a dietary supplement for treatment of various cancers, pre-and-post-menstrual syndromes, and various other disorders.

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Mineral elements, biological studies



### Vitamins

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(isoflavone prepg. method and use)

IT 69-72-7, Salicylic acid, biological studies 121-34-6, Vanillic acid  
149-91-7, Gallic acid, biological studies 156-38-7 327-97-9,  
Chlorogenic acid 331-39-5, Caffeic acid 446-72-0, Genistein  
465-99-6, Hederagenin 485-72-3, Formononetin 486-66-8, Daidzein  
487-36-5, Pinoresinol 490-46-0, Epicatechin 490-79-9 491-80-5,  
Biochanin A 500-38-9, Nordihydroguaiaretic acid 508-01-0,  
Soyasapogenol A 530-57-4, Syringic acid 530-59-6, Sinapic acid  
548-29-8, Isolariciresinol 580-72-3, Matairesinol 595-14-2,  
Soyasapogenol C 595-15-3, Soyasapogenol B 599-07-5, Medicagenic acid  
621-82-9, Cinnamic acid, biological studies 970-73-0, Gallocatechin  
970-74-1, Epigallocatechin 1135-24-6, Ferulic acid 1393-03-9,  
Quillaja saponin 1405-86-3, Glycyrrhizin 2955-23-9, Olivil  
6750-59-0, Soyasapogenol E 11024-24-1, Digitonin 17406-45-0, Tomatine  
25429-38-3, Coumaric acid 27003-73-2, Lariciresinol 29388-59-8,  
Secoisolariciresinol 29656-58-4, Hydroxybenzoic acid 40957-83-3,  
Glycitein 56283-67-1, Lucernic acid 65892-76-4, Soyasapogenol D  
84161-89-7, Zanhic acid 104033-83-2, Soyasapogenol F  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological  
study); USES (Uses)  
(isoflavone prepg. method and use)

L8 ANSWER 13 OF 19 CA COPYRIGHT 2002 ACS

ACCESSION NUMBER: 130:287063 CA  
TITLE: Method of preparing and using phytochemicals  
INVENTOR(S): Empie, Mark; Gugger, Eric  
PATENT ASSIGNEE(S): Archer Daniels Midland Company, USA  
SOURCE: Eur. Pat. Appl., 12 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 5  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 906761	A2	19990407	EP 1998-308060	19981002
EP 906761	A3	19990519		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6261565	B1	20010717	US 1998-162038	19980928
ZA 9808962	A	19990913	ZA 1998-8962	19981001
PRIORITY APPLN. INFO.:				
			US 1997-60549P	P 19971002
			US 1998-162038	P 19980928
			US 1996-614545	A3 19960313
			US 1997-868629	A2 19970604
			US 1998-35588	A2 19980305

AB A compn. is prepd. by extg. phytochems. from plant matter. This compn. is enriched preferably in isoflavones, lignans, saponins, catechins and phenolic acids. Soy is the preferred source of these chems.; however, other plants may also be used, such as red clover, kudzu, flax, and cocoa. The compn. is a dietary supplement for treatment of various cancers, pre- and post-menstrual syndromes, and various other disorders.

IT Flavanols  
Ginsenosides  
Lignans  
Mineral elements, biological studies  
Saponins

### Vitamins

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method of prepg. and dietary use of phytochems.)

IT 50-70-4, Sorbitol, biological studies 63-42-3, Lactose 69-72-7, Salicylic acid, biological studies 120-80-9, Catechin, biological studies 121-34-6, Vanillic acid 149-91-7, Gallic acid, biological studies 156-38-7 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid 446-72-0, Genistein 465-99-6, Hederagenin 485-72-3, Formononetin 486-66-8, Daidzein 487-36-5, Pinoresinol 490-46-0, Epicatechin 490-79-9, Gentisic acid 491-80-5, Biochanin A 500-38-9, Nordihydroguaiaretic acid 508-01-0, Soyasapogenol A 529-59-9, Genistin 530-57-4, Syringic acid 530-59-6, Sinapic acid 548-29-8, Isolariciresinol 552-66-9, Daidzin 557-04-0, Magnesium stearate 580-72-3, Matairesinol 595-14-2, Soyasapogenol C 595-15-3, Soyasapogenol B 599-07-5, Medicagenic acid 621-82-9, Cinnamic acid, biological studies 970-73-0, Gallocatechin 970-74-1, Epigallocatechin 1135-24-6, Ferulic acid 1393-03-9 1405-86-3D, Glycyrrhizin, reaction with digitonin 2955-23-9, Olivil 6750-59-0, Soyasapogenol E 7440-70-2D, Calcium, compds., biological studies 7693-13-2, Calcium citrate 7757-93-9, Dicalcium phosphate 9004-34-6, Cellulose, biological studies 11024-24-1D, Digitonin, reaction with glycyrrhizin 17406-45-0, Tomatine 17482-42-7, Calcium malate 25429-38-3, Coumaric acid 27003-73-2, Lariciresinol 29388-59-8, Secoisolariciresinol 29656-58-4, Hydroxybenzoic acid 40957-83-3, Glycitein 56283-67-1, Lucernic acid 65892-76-4, Soyasapogenol D 84161-89-7, Zanhic acid 104033-83-2, Soyasapogenol F  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method of prepg. and dietary use of phytochems.)

L8 ANSWER 14 OF 19 CA COPYRIGHT 2002 ACS

ACCESSION NUMBER: 125:317396 CA

TITLE: Selective condition inhibitory agents and methods for treating conditions associated with excess nitric oxide

INVENTOR(S): Defeudis, Francis V.

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9630012	A1	19961003	WO 1996-US3755	19960321
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI			
RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML			
AU 9653172	A1	19961016	AU 1996-53172	19960321
PRIORITY APPLN. INFO.:			US 1995-411247	19950324
			US 1995-423829	19950419
			WO 1996-US3755	19960321

OTHER SOURCE(S): MARPAT 125:317396

AB A selective condition inhibitory agent is used for the prophylactic and/or therapeutic treatment of conditions assocd. with excess nitric oxide (NO). Methods are provided for using the selective condition inhibitory agent to treat conditions assocd. with excess NO. The invention is based, at least in part, on the discovery that selective condition inhibitory agents treat conditions assocd. with excess NO, e.g., that level of NO that exists in the subject in excess of that amt. necessary to maintain health and which

is endogenously derived and/or exogenously acquired. The invention provides for the use of selective inhibitory agents, e.g., agents that selectively inhibit the actions and metabolic transformations of excess amts. of endogenously-derived and/or exogenously-acquired NO, for prophylactic and/or therapeutic treatments of a variety of conditions, e.g., atherogenesis, restenosis, hyperplasia, inflammation, and neurodegenerative disorders. The selective condition inhibitory agents may be antioxidants, NO trappers, nitrate scavengers nitrite scavengers, or reductants.

IT Flavonoids

Phosphates, biological studies

Tannins

Tocopherols

**Vitamins**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(selective condition inhibitory agents and methods for treating conditions assocd. with excess nitric oxide)

IT 50-81-7D, Ascorbic acid, derivs. 52-90-4, Cysteine, biological studies  
65-85-0D, Benzoic acid, esters 69-65-8, Mannitol 70-18-8, Glutathione,  
biological studies 84-60-6, Anthraflavic acid 91-53-2, Ethoxyquin  
94-13-3, Propylparaben 97-53-0, Eugenol 100-63-0, Phenylhydrazine  
117-39-5, Quercetin 120-80-9, Catechol, biological studies 123-31-9,  
Hydroquinone, biological studies 128-37-0, Butylated hydroxytoluene,  
biological studies 137-66-6 149-91-7, Gallic acid, biological studies  
149-91-7D, Gallic acid, esters **327-97-9**, Chlorogenic acid  
**331-39-5**, Caffeic acid 476-66-4, Ellagic acid 500-38-9,  
Nordihydroguaiaretic acid 520-26-3, Hesperidin 529-44-2, Myricetin  
531-75-9, Esculin 592-88-1, Diallyl sulfide 592-88-1D, Diallyl  
sulfide, derivs. **1135-24-6**, Ferulic acid 1406-18-4D, Vitamin  
E, phosphate diesters 1948-33-0, tert-Butylhydroquinone 9001-05-2,  
Catalase 9013-66-5, Reduced glutathione peroxidase 9054-89-1,  
Superoxide dismutase 23288-49-5, Probucol 25013-16-5, Butylated  
hydroxyanisole 98829-12-0, 2-O-Octadecylascorbic acid  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(selective condition inhibitory agents and methods for treating  
conditions assocd. with excess nitric oxide)

L8 ANSWER 15 OF 19 CA COPYRIGHT 2002 ACS

ACCESSION NUMBER: 122:150993 CA

TITLE: Evaluation of chemopreventive agents in different  
mechanistic classes [by] using a rat tracheal  
epithelial cell culture transformation assay

AUTHOR(S): Arnold, Julia T.; Wilkinson, Betty P.; Sharma, Sheela;  
Steele, Vernon E.

CORPORATE SOURCE: Cellular and Molecular Toxicology Program, ManTech  
Environmental Technology, Research Triangle Park, NC,  
27709, USA

SOURCE: Cancer Research (1995), 55(3), 537-43  
CODEN: CNREA8; ISSN: 0008-5472

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The rat tracheal epithelial (RTE) cell focus inhibition assay was used to identify potential anticarcinogenic agents. Ninety-nine compds. were evaluated for their ability to inhibit benzo[a]pyrene-induced transformation of RTE cells. Freshly isolated RTE cells were exposed to benzo[a]pyrene alone or in combination with a substance to be tested. After 30 days in culture, transformed foci were scored and inhibition was quantitated. Foci formation was inhibited mainly by agents which modulate the initiation of carcinogenesis by altering drug-metabolizing enzymes, inhibiting the binding of benzo[a]pyrene to DNA, enhancing detoxification of activated carcinogens, or by inducing epithelial cell differentiation. Such agents include antioxidants, free-radical scavengers, glutathione

S-transferase enhancers, **vitamins**, retinoids, and SH compds. Agents which inhibit ornithine decarboxylase and arachidonic acid metab. were not as effective. The RTE assay provides important data for compd. selection prior to whole-animal-screening assays in the development of carcinogenesis-inhibiting drugs.

- AB The rat tracheal epithelial (RTE) cell focus inhibition assay was used to identify potential anticarcinogenic agents. Ninety-nine compds. were evaluated for their ability to inhibit benzo[a]pyrene-induced transformation of RTE cells. Freshly isolated RTE cells were exposed to benzo[a]pyrene alone or in combination with a substance to be tested. After 30 days in culture, transformed foci were scored and inhibition was quantitated. Foci formation was inhibited mainly by agents which modulate the initiation of carcinogenesis by altering drug-metabolizing enzymes, inhibiting the binding of benzo[a]pyrene to DNA, enhancing detoxification of activated carcinogens, or by inducing epithelial cell differentiation. Such agents include antioxidants, free-radical scavengers, glutathione S-transferase enhancers, **vitamins**, retinoids, and SH compds. Agents which inhibit ornithine decarboxylase and arachidonic acid metab. were not as effective. The RTE assay provides important data for compd. selection prior to whole-animal-screening assays in the development of carcinogenesis-inhibiting drugs.

IT Mercapto compounds

Retinoids

**Vitamins**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(screening of drugs for inhibiting carcinogenesis by using rat tracheal epithelial cell culture)

- IT 50-78-2, Acetylsalicylic acid 52-53-9, Verapamil 53-43-0, Dehydroepiandrosterone 53-86-1, Indomethacin 56-40-6, Glycine, biological studies 57-55-6, Propylene glycol, biological studies 58-27-5, Vitamin K3 58-73-1, Diphenhydramine 58-93-5, Hydrochlorothiazide 59-30-3, Folic acid, biological studies 59-51-8, DL-Methionine 59-67-6, Nicotinic acid, biological studies 60-23-1, Cysteamine 60-54-8, Tetracycline 60-82-2, Phloretin 60-87-7, Promethazine 61-73-4, Methylene blue 62-46-4, Thiocetic acid 69-65-8, D-Mannitol 69-93-2, Uric acid, biological studies 73-31-4, Melatonin 74-79-3, Arginine, biological studies 77-52-1, Ursolic acid 79-63-0, Lanosterol 83-46-5, .beta.-Sitosterol 83-86-3, Inositol hexaphosphate 83-89-6, Quinacrine 87-11-6, Thiolutin 99-73-0, p-Bromophenacyl bromide 110-17-8, Fumaric acid, biological studies 121-32-4, Ethylvanillin 121-33-5, Vanillin 121-79-9, Propyl gallate 129-46-4, Sodium suramin 137-66-6, Ascorbyl palmitate 141-84-4, 2-Thioxo-4-thiazolidinone 146-17-8, Riboflavin 5'-phosphate 150-13-0, p-Aminobenzoic acid 150-76-5, p-Methoxyphenol 155-58-8, Rhapontin 305-84-0, Carnosine 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid 458-37-7, Curcumin 471-53-4, .alpha.-Glycyrrhetic acid 471-80-7, Steviol 479-61-8 480-16-0, Morin 486-12-4, Triprolidine 520-36-5, Apigenin 529-44-2, Myricetin 532-11-6, Anethole trithione 569-65-3, Meclizine 592-88-1, Diallyl sulfide 599-79-1, Sulfasalazine 622-78-6, Benzyl isothiocyanate 624-49-7, Dimethyl fumarate 1135-24-6, Ferulic acid 1191-85-1, ETYA 1449-05-4, .beta.-Glycyrrhetic acid 2050-87-5, Diallyl trisulfide 2179-58-0, Allyl methyl disulfide 2257-09-2, Phenethylisothiocyanate 2609-46-3, Amiloride 3766-08-3, DL-Palmitoylcarnitine 5697-56-3, Carbenoxolone 6385-02-0, Sodium meclofenamate 7235-40-7, .beta.-Carotene 7631-95-0, Sodium molybdate 7772-98-7, Sodium thiosulfate 8050-81-5, Simethicone 9003-39-8, Polyvinylpyrrolidone 10102-18-8, Sodium selenite 11103-57-4, Vitamin A 15826-37-6, Sodium cromolyn 17407-37-3, .alpha.-Tocopherol succinate 22916-47-8, Miconazole 25496-72-4, Glycerol monooleate 34135-85-8, Allyl methyl trisulfide 38194-50-2, Sulindac 52942-31-1, Etoperidone 55268-74-1,

Praziquantel 57455-81-9, MAK 5 64224-21-1, Oltipraz 65595-90-6,  
 N-(6-Aminoethyl)-5-chloro-1-naphthalenesulfonamide 75330-75-5,  
 Lovastatin 75775-33-6, Purpurin 79331-86-5, MAK 4 91531-30-5,  
 Antineoplaston A10 92285-01-3, Ajoene 110683-02-8 160371-97-1, BASF  
 47851 160372-07-6, Ro 16-9100 160372-08-7, Ro 19-2968 161279-28-3,  
 BASF 47848 161279-29-4, BASF 47850 161279-30-7, BASF 51328  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)

(screening of drugs for inhibiting carcinogenesis by using rat tracheal  
 epithelial cell culture)

L8 ANSWER 16 OF 19 CA COPYRIGHT 2002 ACS

ACCESSION NUMBER: 116:78318 CA

TITLE: Action of beer and its ingredients on gastric acid  
 secretion and release of gastrin in humans

AUTHOR(S): Singer, Manfred V.; Teyssen, Stephan; Eysselein,  
 Viktor E.

CORPORATE SOURCE: Dep. Med., Univ. Essen, Essen, Germany

SOURCE: Gastroenterology (1991), 101(4), 935-42

CODEN: GASTAB; ISSN: 0016-5085

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The intragastric action of beer and its known ingredients before and after  
 fermm. on gastric acid secretion and release of gastrin was studied in  
 healthy humans. None of 11 tested ingredients of fermented beer (2  
 .times. 500 mL, pH 5.5, given either alone or in combination) or hop ext.  
 had any significant effect. Finished beer (6 wk old) and new beer were  
 potent stimuli of acid output, causing 93% and 76% of the incremental  
 maximal acid output in response to pentagastrin (6 .mu.g/kg SC), resp.  
 Before the addn. of yeast, preproducts of beer were considerably less  
 potent. Thus, first and finished wort caused only a minor acid response  
 which was 48% and 46% of maximal acid output. Foreign fermm. in first and  
 finished wort is presumably the reason for the stimulatory action because  
 glucose solns. in concns. (11.5% wt/vol) seen in wort did not stimulate  
 acid secretion. However, glucose solns. to which yeast was added,  
 resulting in fermm., were as potent stimuli of acid secretion as beer.  
 Lyophilization of beer at pH 11.0 and dialysis (cutoff mol wt, 1000)  
 removed the stimulatory substances. The plasma gastrin responses  
 paralleled the gastric acid response to the different stimulants. It was  
 concluded that (a) the addn. of yeast to finished wort and the following  
 alc. fermm. are the essential steps for the stimulatory action of beer on  
 gastric acid secretion and release of gastrin; (b) carbohydrate  
 metabolites with a mol. wt. of less than 1000 are the acid-stimulatory  
 agents in fermented beer; and (c) gastrin is the mediator of the  
 stimulation of acid secretion because all substances that had a potent  
 acid-stimulatory action also were potent stimuli of gastrin release.

IT Bitter principles

Electrolytes

Amines, biological studies

Amino acids, biological studies

Carboxylic acids, biological studies

Flavonoids

**Vitamins**

RL: BIOL (Biological study)

(of beer, gastric acid secretion and gastrin release in human response  
 to)

IT 50-89-5, Thymidine, biological studies 51-45-6, Histamine, biological  
 studies 51-67-2 52-90-4, L-Cysteine, biological studies 56-40-6,  
 Glycine, biological studies 56-41-7, L-Alanine, biological studies  
 56-45-1, L-Serine, biological studies 56-84-8, L-Aspartic acid,  
 biological studies 56-86-0, L-Glutamic acid, biological studies  
 56-87-1, L-Lysine, biological studies 58-61-7, Adenosine, biological

studies 58-63-9, Inosine 58-85-5, Biotin 58-96-8, Uridine 59-43-8, Thiamin, biological studies 59-67-6, Nicotinic acid, biological studies 60-18-4, L-Tyrosine, biological studies 61-90-5, L-Leucine, biological studies 63-68-3, L-Methionine, biological studies 63-91-2, L-Phenylalanine, biological studies 64-17-5, Ethanol, biological studies 64-19-7, Acetic acid, biological studies 65-23-6, Pyridoxin 65-46-3, Cytidine 66-22-8, Uracil, biological studies 68-94-0, Hypoxanthine 69-89-6, Xanthine 71-00-1, L-Histidine, biological studies 71-30-7, Cytosine 72-18-4, L-Valine, biological studies 72-19-5, L-Threonine, biological studies 73-22-3, L-Tryptophan, biological studies 73-24-5, Adenine, biological studies 73-32-5, L-Isoleucine, biological studies 73-40-5, Guanine 74-79-3, L-Arginine, biological studies 77-92-9, Citric acid, biological studies 83-88-5, Riboflavin, biological studies 110-60-1, Putrescine 118-00-3, Guanosine, biological studies 127-17-3, Pyruvic acid, biological studies 147-85-3, L-Proline, biological studies 149-91-7, Gallic acid, biological studies 153-18-4, Rutin 154-23-4, Catechin 327-97-9, Chlorogenic acid 331-39-5 490-46-0, Epicatechin 520-18-3 522-12-3 526-95-4, Gluconic acid 529-44-2 530-59-6 598-82-3, DL-Lactic acid, biological studies 617-48-1, DL-Malic acid 1135-24-6 7400-08-0, p-Cumaric acid 7439-95-4, Magnesium, biological studies 7440-70-2, Calcium, biological studies 138932-10-2, Hemipanthothenic acid 138932-92-0, Zol acid  
 RL: BIOL (Biological study)

(of beer, gastric acid secretion and gastrin release in human response to)

L8 ANSWER 17 OF 19 USPATFULL

ACCESSION NUMBER: 2002:14657 USPATFULL  
 TITLE: Method for dyeing dry hair  
 INVENTOR(S): Sorensen, Niels Henrik, Skaevinge, DENMARK  
 PATENT ASSIGNEE(S): Novozymes A/S, Bagsvaerd, DENMARK (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002007524	A1	20020124
APPLICATION INFO.:	US 2001-819236	A1	20010328 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. WO 2001-DK166, filed on 13 Mar 2001, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	DK 2000-439	20000317
	US 2000-192688P	20000328 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	NOVOZYMES NORTH AMERICA, INC., C/O NOVO NORDISK OF NORTH AMERICA, INC., 405 LEXINGTON AVENUE, SUITE 6400, NEW YORK, NY, 10174	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	1345	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods for dyeing keratinous fibers, without significantly damaging the hair. According to the method of the present invention the fibers are treated in a dry state by contacting said fibers with at least one oxidoreductase and at least one dye precursor. In this way it is possible to dye, e.g. human hair, in a simple and efficient manner.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . agents or their mixtures, polymers, thickening agents,

antioxidants, penetration agents, sequestrant agents, perfumes, buffers, dispersion agents, filmogene agents, filtration agents, **vitamins**, preservation agents and opacity agents.

IT 60-18-4, L-Tyrosine, biological studies 81-11-8, 4,4'-Diaminostilbene-2,2'-disulfonic acid 84-08-2 84-97-9, 10-(3-(4-Methyl-1-piperazinyl)propyl)phenothiazine 92-87-5, Benzidine 92-88-6, 4,4'-Dihydroxybiphenyl 99-96-7, 4-Hydroxybenzoic acid, biological studies 119-79-9, 5-Aminonaphthalene-2-sulfonic acid 119-90-4, 3,3'-Dimethoxybenzidine 119-93-7, 3,3'-Dimethylbenzidine 130-17-6, 2-(p-Aminophenyl)-6-methylbenzothiazole-7-sulfonic acid 134-96-3, Syringaldehyde 256-96-2, Iminostilbene 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid 331-39-5D, Caffeic acid, esters 362-03-8, 10-Phenothiazine-propionic acid 362-04-9, Methyl 10-phenothiazinepropionate 494-44-0, 7-Aminonaphthalene-2-sulfonic acid 525-64-4, 2,7-Diaminofluorene 530-57-4, Syringic acid 530-59-6, Sinapic acid 537-65-5, 4,4'-Diaminodiphenylamine 603-34-9, Triphenylamine 611-99-4, 4,4'-Dihydroxybenzophenone 884-35-5, Methyl syringate 1135-24-6, Ferulic acid 1207-72-3, 10-Methylphenothiazine 1637-16-7, 10-Ethylphenothiazine 1696-60-2, Vanillin azine 1749-04-8, N-[4-(Dimethylamino)benzylidene]-p-anisidine 2243-62-1, 1,5-Diaminonaphthalene 2478-38-8, Acetosyringone 2814-61-1, 2,2'-Azinobis-(3-ethylbenzothiazoline-6-sulfonate) 3943-80-4, Ethyl syringate 5060-82-2, 7-Methoxy-2-naphthol 7046-84-6, 10-(2-Hydroxyethyl)phenothiazine 7152-42-3, 10-Phenylphenothiazine 7570-37-8, 4-Amino-4'-methoxystilbene 13924-28-2, N-Benzylidene-4-biphenylamine 15375-48-1, 10-Propylphenothiazine 16712-64-4, 6-Hydroxy-2-naphthoic acid 17427-04-2, 10-Isopropylphenothiazine 20962-92-9, 10-Allylphenothiazine 21429-17-4 21977-42-4, 10-Phenoxazinepropionic acid 25324-52-1, 2-Acetyl-10-methylphenothiazine 25782-99-4, 10-Methylphenoxazine 27151-57-1, 4,4'-Dimethoxy-N-methyldiphenylamine 54827-17-7, 3,3',5,5'-Tetramethylbenzidine 58574-03-1, 4'-Hydroxy-4-biphenylcarboxylic acid 60411-11-2, 10-Ethyl-4-phenothiazinecarboxylic acid 63397-92-2, 10-(3-Hydroxypropyl)phenothiazine 69113-98-0 72684-97-0, Propyl syringate 90510-22-8, Hexyl syringate 92199-64-9, 10-(2-Hydroxyethyl)phenoxazine 136832-74-1 177959-98-7, Butyl syringate 177959-99-8, Octyl syringate 361369-57-5 (dyeing compns. for dry hair contg. microbial oxidoreductase, dye precursor, and mediator)

L8 ANSWER 18 OF 19 USPATFULL

ACCESSION NUMBER: 2001:178618 USPATFULL  
 TITLE: Allomelanin production  
 INVENTOR(S): Banister, Nigel E., London, United Kingdom  
 Cheetham, Peter S. J., Tunbridge Wells, United Kingdom  
 PATENT ASSIGNEE(S): Zylepsis Limited, United Kingdom (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6303106	B1	20011016
	WO 9720944		19970612
APPLICATION INFO.:	US 1998-77912		19980925 (9)
	WO 1996-GB3015		19961209
			19980925 PCT 371 date
			19980925 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1995-24997	19951207
	GB 1995-25428	19951213
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Gitomer, Ralph	

ASSISTANT EXAMINER: Khare, Devesh  
NUMBER OF CLAIMS: 32  
EXEMPLARY CLAIM: 1  
LINE COUNT: 608

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of producing a melanin comprises oxidizing a phenolic compound at one or more hydroxyl groups thereof, wherein the phenolic compound is selected from 5-hydroxyindole and derivatives thereof and compounds of formula (1) and the oxidation is provided by biotransformation in the presence of an oxidoreductase enzyme, the compound of formula (1),  
##STR1##

wherein R.sup.1 is H or OH; R.sup.2 is H, OH or OCH.sub.3; R.sup.3 is H or OH at least one of R.sup.1 and R.sup.3 being OH; R.sup.4 is selected from H, R, --COOX and R.sup.7 --COOX, wherein R is an optionally substituted saturated or unsaturated alkyl group having from 1 to 12 carbon atoms, R.sup.7 is an optionally substituted saturated or unsaturated alkylene group having from 1 to 12 carbon atoms and X is selected from H and aliphatic and aromatic ester forming groups; and R.sup.5 and R.sup.6 is each independently selected from H, OH, NH.sub.2, OCH.sub.3, CH.sub.3, SH, NHCO.sub.2, NHCH.sub.3, COOH and saturated or unsaturated alkyl groups having up to 8 carbon atoms.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . additives may include pH-adjusting agents, antioxidants, chelating agents, preservatives, biocides, colourants, perfumes, blood promoters, disinfectants, anti-inflammatory agents, cell activating agents, **vitamins**, amino-acids, moisture retaining agents and keratin-solubilising agents.

IT 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid  
1135-24-6, Ferulic acid 1953-54-4, 5-Hydroxyindole 7400-08-0,  
4-Hydroxycinnamic acid 191729-68-7 191729-69-8 191729-70-1  
191729-71-2 191729-72-3 191729-73-4  
(enzymic melanin prodn.)

L8 ANSWER 19 OF 19 USPATFULL

ACCESSION NUMBER: 2001:111836 USPATFULL  
TITLE: Method of preparing and using isoflavones  
INVENTOR(S): Empie, Mark, Forsyth, IL, United States  
Gugger, Eric, Latham, IL, United States  
PATENT ASSIGNEE(S): Archer Daniels Midland Company, Decatur, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6261565	B1	20010717
APPLICATION INFO.:	US 1998-162038		19980928 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1998-35588, filed on 5 Mar 1998, now patented, Pat. No. US 6033714 Continuation-in-part of Ser. No. US 1997-868629, filed on 4 Jun 1997, now patented, Pat. No. US 5792503 Division of Ser. No. US 1996-614545, filed on 13 Mar 1996, now patented, Pat. No. US 5702752		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-60549P	19971002 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Gitomer, Ralph	
ASSISTANT EXAMINER:	Khare, D	
LEGAL REPRESENTATIVE:	Laff, Whitesel & Saret, Ltd., Whitesel, J. Warren	
NUMBER OF CLAIMS:	54	



EXEMPLARY CLAIM: 1  
LINE COUNT: 762

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides for a refinement of phytochemicals in order to tailor the refined end product to particular human dietary needs. More particularly, a composition is prepared by extracting phytochemicals from plant matter. This composition is enriched preferably in two or more isoflavones, lignans, saponins, catechins and phenolic acids. Soy is the preferred source of these chemicals; however, other plants may also be used, such as red clover, kudzu, flax, and cocoa. The composition is a dietary supplement for treatment of various cancers, pre-and-post-menstrual syndromes, and various other disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . produce the optimized composition. Further, this extract composition may be formulated with one or more other dietary nutrients, such as **vitamins**, minerals, amino acids, etc., to provide a nutritional supplement further optimized for a desired health effect. All these ingredients may. . .

CLM What is claimed is:

28. The product of claim 27 additionally comprising a dietary supplemental nutrient selected from the group consisting of **vitamins** and minerals.

IT 69-72-7, Salicylic acid, biological studies 121-34-6, Vanillic acid  
149-91-7, Gallic acid, biological studies 156-38-7 **327-97-9**,  
Chlorogenic acid **331-39-5**, Caffeic acid 446-72-0, Genistein  
465-99-6, Hederagenin 485-72-3, Formononetin 486-66-8, Daidzein  
487-36-5, Pinorensin 490-46-0, Epicatechin 490-79-9 491-80-5,  
Biochanin A 500-38-9, Nordihydroguaiaretic acid 508-01-0,  
Soyasapogenol A 530-57-4, Syringic acid 530-59-6, Sinapic acid  
548-29-8, Isolariciresinol 580-72-3, Matairesinol 595-14-2,  
Soyasapogenol C 595-15-3, Soyasapogenol B 599-07-5, Medicagenic acid  
621-82-9, Cinnamic acid, biological studies 970-73-0, Gallocatechin  
970-74-1, Epigallocatechin **1135-24-6**, Ferulic acid 1393-03-9,  
Quillaja saponin 1405-86-3, Glycyrrhizin 2955-23-9, Olivil  
6750-59-0, Soyasapogenol E 11024-24-1, Digitonin 17406-45-0, Tomatine  
25429-38-3, Coumaric acid 27003-73-2, Lariciresinol 29388-59-8,  
Secoisolariciresinol 29656-58-4, Hydroxybenzoic acid 40957-83-3,  
Glycitein 56283-67-1, Lucernic acid 65892-76-4, Soyasapogenol D  
84161-89-7, Zanhic acid 104033-83-2, Soyasapogenol F  
(isoflavone prepg. method and use)

L9 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:183749 CAPLUS

DOCUMENT NUMBER: 136:221751

TITLE: Agents for preventing or treating **hypertension**

INVENTOR(S): Suzuki, Atsushi; Ochiai, Ryuji; Tokimitsu, Ichiro

PATENT ASSIGNEE(S): Kao Corporation, Japan

SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1186297	A2	20020313	EP 2001-121289	20010905
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002080355	A2	20020319	JP 2000-268100	20000905
JP 2002080356	A2	20020319	JP 2000-268101	20000905
JP 2002080381	A2	20020319	JP 2000-268102	20000905
JP 2002080357	A2	20020319	JP 2000-268104	20000905
US 2002054923	A1	20020509	US 2001-944079	20010904
JP 2002154977	A2	20020528	JP 2001-268728	20010905
PRIORITY APPLN. INFO.:			JP 2000-268100	A 20000905
			JP 2000-268101	A 20000905
			JP 2000-268102	A 20000905
			JP 2000-268103	A 20000905
			JP 2000-268104	A 20000905

AB The invention relates to an agent for preventing or treating **hypertension**, and food for preventing **hypertension**. The agent does not become a burden in daily intake and has a higher antihypertensive effect and is useful as a diet during treatment for patients of **hypertension**. The agent contains the following components: a compd. selected from the group consisting of caffeic, chlorogenic, and ferulic acids, and esters and salts; and a component selected from the group consisting of central nervous system stimulating components, food fibers, exts. of perennial evergreen leaves of the genus Camellia, Theaceae, or Eucommia ulmoides, Eucommia, org. acids having a mol. wt. of 60 to 300 (excluding citric acid) and salts, and sugar alcs. Thus, a soft capsule formulation was prepd. from gelatin 70.0, glycerol 22.9, methylparaben 0.15, propylparaben 0.51, and water 6.44%. This was mixed with ferulic acid 50 and capsaicin 100 mg.

TI Agents for preventing or treating **hypertension**

AB The invention relates to an agent for preventing or treating **hypertension**, and food for preventing **hypertension**. The agent does not become a burden in daily intake and has a higher antihypertensive effect and is useful as a diet during treatment for patients of **hypertension**. The agent contains the following components: a compd. selected from the group consisting of caffeic, chlorogenic, and ferulic acids, and esters and salts; and a component selected from the group consisting of central nervous system stimulating components, food fibers, exts. of perennial evergreen leaves of the genus Camellia, Theaceae, or Eucommia ulmoides, Eucommia, org. acids having a mol. wt. of 60 to 300 (excluding citric acid) and salts, and sugar alcs. Thus, a soft capsule formulation was prepd. from gelatin 70.0, glycerol 22.9, methylparaben 0.15, propylparaben 0.51, and water 6.44%. This was mixed with ferulic acid 50 and capsaicin 100 mg.

IT Antihypertensives

Dietary fiber

Nervous system stimulants

(agents for preventing or treating **hypertension**)

IT Alditols  
Carboxylic acids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(agents for preventing or treating **hypertension**)

IT Camellia  
Eucommia  
Eucommia ulmoides  
Theaceae  
(exts.; agents for preventing or treating **hypertension**)

IT Beverages  
(health; agents for preventing or treating **hypertension**)

IT 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid  
1135-24-6, Ferulic acid 9005-53-2, Lignin, biological studies  
16630-40-3, Sodium 3,4-dihydroxycinnamate 21238-33-5, Cycloartenol  
ferulate 24276-84-4, Sodium ferulate  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(agents for preventing or treating **hypertension**)

L9 ANSWER 2 OF 4 CA COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 136:221751 CA  
TITLE: Agents for preventing or treating **hypertension**  
INVENTOR(S): Suzuki, Atsushi; Ochiai, Ryuji; Tokimitsu, Ichiro  
PATENT ASSIGNEE(S): Kao Corporation, Japan  
SOURCE: Eur. Pat. Appl., 12 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1186297	A2	20020313	EP 2001-121289	20010905
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002080355	A2	20020319	JP 2000-268100	20000905
JP 2002080356	A2	20020319	JP 2000-268101	20000905
JP 2002080381	A2	20020319	JP 2000-268102	20000905
JP 2002080357	A2	20020319	JP 2000-268104	20000905
US 2002054923	A1	20020509	US 2001-944079	20010904
JP 2002154977	A2	20020528	JP 2001-268728	20010905
PRIORITY APPLN. INFO.:			JP 2000-268100	A 20000905
			JP 2000-268101	A 20000905
			JP 2000-268102	A 20000905
			JP 2000-268103	A 20000905
			JP 2000-268104	A 20000905

AB The invention relates to an agent for preventing or treating **hypertension**, and food for preventing **hypertension**. The agent does not become a burden in daily intake and has a higher antihypertensive effect and is useful as a diet during treatment for patients of **hypertension**. The agent contains the following components: a compd. selected from the group consisting of caffeic, chlorogenic, and ferulic acids, and esters and salts; and a component selected from the group consisting of central nervous system stimulating components, food fibers, exts. of perennial evergreen leaves of the genus Camellia, Theaceae, or Eucommia ulmoides, Eucommia, org. acids having a mol. wt. of 60 to 300 (excluding citric acid) and salts, and sugar alcs. Thus, a soft capsule formulation was prepd. from gelatin 70.0, glycerol 22.9, methylparaben 0.15, propylparaben 0.51, and water 6.44%. This was mixed with ferulic acid 50 and capsaicin 100 mg.

TI Agents for preventing or treating **hypertension**

AB The invention relates to an agent for preventing or treating **hypertension**, and food for preventing **hypertension**. The

agent does not become a burden in daily intake and has a higher antihypertensive effect and is useful as a diet during treatment for patients of **hypertension**. The agent contains the following components: a compd. selected from the group consisting of caffeic, chlorogenic, and ferulic acids, and esters and salts; and a component selected from the group consisting of central nervous system stimulating components, food fibers, exts. of perennial evergreen leaves of the genus Camellia, Theaceae, or Eucommia ulmoides, Eucommia, org. acids having a mol. wt. of 60 to 300 (excluding citric acid) and salts, and sugar alcs. Thus, a soft capsule formulation was prepd. from gelatin 70.0, glycerol 22.9, methylparaben 0.15, propylparaben 0.51, and water 6.44%. This was mixed with ferulic acid 50 and capsaicin 100 mg.

IT Antihypertensives  
Dietary fiber  
Nervous system stimulants  
(agents for preventing or treating **hypertension**)

IT Alditols  
Carboxylic acids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(agents for preventing or treating **hypertension**)

IT Camellia  
Eucommia  
Eucommia ulmoides  
Theaceae  
(exts.; agents for preventing or treating **hypertension**)

IT Beverages  
(health; agents for preventing or treating **hypertension**)

IT 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid  
1135-24-6, Ferulic acid 9005-53-2, Lignin, biological studies  
16630-40-3, Sodium 3,4-dihydroxycinnamate 21238-33-5, Cycloartenol  
ferulate 24276-84-4, Sodium ferulate  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(agents for preventing or treating **hypertension**)

L9 ANSWER 3 OF 4 USPATFULL

ACCESSION NUMBER: 2002:105721 USPATFULL  
TITLE: Agent for preventing, improving or treating  
**hypertension**  
INVENTOR(S): Suzuki, Atsushi, Haga-gun, JAPAN  
Ochiai, Ryuji, Haga-gun, JAPAN  
Tokimitsu, Ichiro, Haga-gun, JAPAN  
PATENT ASSIGNEE(S): Kao Corporation, Chuo-ku, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002054923	A1	20020509
APPLICATION INFO.:	US 2001-944079	A1	20010904 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-268101	20000905
	JP 2000-268103	20000905
	JP 2000-268102	20000905
	JP 2000-268104	20000905
	JP 2000-268100	20000905

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC, FOURTH  
FLOOR, 1755 JEFFERSON DAVIS HIGHWAY, ARLINGTON, VA,  
22202  
NUMBER OF CLAIMS: 6  
EXEMPLARY CLAIM: 1  
LINE COUNT: 800

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to an agent for preventing, improving or treating **hypertension**, which exhibits a hypotensive effect, inhibits the rise of blood pressure and improves **hypertension**, and food for preventing or improving **hypertension**, which does not become a burden in daily intake, has a higher antihypertensive effect and is useful as a diet during treatment for patients of **hypertension**. The agent for preventing, improving or treating **hypertension** contains the following components (A) and (B):

(A) a compound selected from the group consisting of caffeic acid, chlorogenic acid and ferulic acid, and esters and pharmaceutically acceptable salts thereof; and

(B) a component selected from the group consisting of central nervous system stimulating components, food fibers, extracts of perennial evergreen leaves of the genus *Camellia*, *Theaceae*, or *Eucommia ulmoides* Oliver, *Eucommiae*, organic acids having a molecular weight of 60 to 300 (excluding citric acid) and pharmaceutically acceptable salts thereof, and sugar alcohols.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

TI Agent for preventing, improving or treating **hypertension**

AB The invention relates to an agent for preventing, improving or treating **hypertension**, which exhibits a hypotensive effect, inhibits the rise of blood pressure and improves **hypertension**, and food for preventing or improving **hypertension**, which does not become a burden in daily intake, has a higher antihypertensive effect and is useful as a diet during treatment for patients of **hypertension**. The agent for preventing, improving or treating **hypertension** contains the following components (A) and (B):

SUMM [0002] The present invention relates to an agent for preventing, improving or treating **hypertension**, which permits inhibiting the rise of blood pressure and moreover improving **hypertension** and is useful as food and drink, and food such as food for specific health in addition to a drug for preventing, improving or treating **hypertension**.

SUMM . . . infarction and heart failure, and cerebrovascular diseases such as cerebral infarction, cerebral hemorrhage and subarachnoid hemorrhage very closely relate to **hypertension** and stand second and third, respectively, in the Japanese causes of death. According to the basis research (the 1998 year) . . . of the national life by the Ministry of Health and Welfare, the number of patients going to hospital regularly with **hypertension** is sixty-four per thousand in Japan and stands first in the cause of decease. As a countermeasure against the **hypertension**, may be mentioned the use of antihypertensive drugs such as diuretics, sympatholytic depressants, vasodilators and angiotensin converting enzyme inhibitors. These drugs are mainly applied to serious patients of **hypertension**. On the other hand, general treatments aiming at improving life custom, such as dietetic therapy, therapeutic exercise and restriction of smoking and drinking, are widely applied to slight and serious patients of **hypertension**. Therefore, the importance of general treatments is recognized. Among others, improvement in the custom of eating is said to be.

SUMM [0005] However, under the circumstances, many of drugs used for the purpose of treating **hypertension** are satisfactory in effectiveness, whereas patients are heavily burdened with their side effects, such as tachycardia and bradycardia, existing in. . .

SUMM [0006] It is an object of the present invention to provide an agent for preventing, improving or treating **hypertension**, which is excellent in safety, does not become a burden in daily intake and has a higher antihypertensive effect.

SUMM [0008] According to the present invention, there is thus provided an agent for preventing, improving or treating **hypertension**, comprising the following components (A) and (B):

SUMM . . . According to the present invention, there is also provided a food comprising such an agent for preventing, improving or treating **hypertension**.

SUMM . . . further provided use of the above-described components (A) and (B) for preparation of an agent for preventing, improving or treating **hypertension**.

SUMM [0013] According to the present invention, there is still further provided a method of treating **hypertension**, which comprises administering effective amounts of the components (A) and (B).

SUMM [0014] The agent for preventing, improving or treating **hypertension** according to the present invention exhibits a hypotensive effect, inhibits the rise of blood pressure, improves **hypertension** and is useful as an agent for preventing, improving or treating **hypertension**. Besides, the agent does not become a burden in daily intake, has a higher antihypertensive effect and is useful as a diet during treatment for patients of **hypertension** and also as food and drink for preventing or improving **hypertension**, food such as food for specific health, and a quasi-drug.

SUMM [0022] In the agent according to the present invention for preventing, improving or treating **hypertension**, the component (A) may be contained in a proportion of 0.001 to 5% by weight (hereinafter indicated merely by "%"), . . .

SUMM . . . 0.001 to 1%, particularly 0.005 to 0.5% in the agent according to the present invention for preventing, improving or treating **hypertension**.

SUMM . . . 1 to 20%, particularly 0.5 to 10% in the agent according to the present invention for preventing, improving or treating **hypertension**.

SUMM . . . 1 to 5% in terms of solids in the agent according to the present invention for preventing, improving or treating **hypertension**.

SUMM . . . 0.0005 to 10%, particularly 0.001 to 6% in the agent according to the present invention for preventing, improving or treating **hypertension**.

SUMM . . . 0.1 to 70%, particularly 1 to 50% in the agent according to the present invention for preventing, improving or treating **hypertension**.

SUMM [0044] When the agent according to the present invention for preventing, improving or treating **hypertension** is used as a medicine, a pharmaceutically acceptable carrier may be added to the above-described active components to prepare an. . .

SUMM [0045] When the agent according to the present invention for preventing, improving or treating **hypertension** is used as a food, other food stuffs may be added to the active ingredients of the components (A) and. . .

SUMM [0046] The effective dose of the agent according to the present invention for preventing, improving or treating **hypertension** per day for an adult (body weight: 60 kg) is as follows:

DETD [0084] These cookies Nos. 4 to 8 were tasty and observed permitting being ingested by adults suffering from **hypertension**.

CLM What is claimed is:

1. An agent for preventing, improving or treating **hypertension**, comprising the following components (A) and (B): (A) a compound selected from the group consisting of caffeic acid, chlorogenic acid. . .
2. The agent according to claim 1 for preventing, improving or treating **hypertension**, wherein the component (B) is selected from the group consisting of heat components of ginger, red pepper and pepper.

3. The agent according to claim 1 for preventing, improving or treating **hypertension**, wherein the component (B) is selected from the group consisting of fermented products of grains, fruit juices and extracts thereof.

4. A food comprising the agent according to any one of claims 1 to 3 for preventing, improving or treating **hypertension**.

6. A method of treating **hypertension**, which comprises administering effective amounts of the following components (A) and (B):  
(A) a compound selected from the group consisting.

IT 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid  
1135-24-6, Ferulic acid 9005-53-2, Lignin, biological studies  
16630-40-3, Sodium 3,4-dihydroxycinnamate 21238-33-5, Cycloartenol  
ferulate 24276-84-4, Sodium ferulate  
(agents for preventing or treating hypertension)

L9 ANSWER 4 OF 4 USPATFULL

ACCESSION NUMBER: 2002:98915 USPATFULL

TITLE: Compositions and methods for alleviating  
**hypertension** or preventing a rise in blood  
pressure

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EXEMPLARY CLAIM:	1	
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Products and compositions for preventing or reducing the severity of **hypertension**. These products contain (a) ferulic acid or a ferulate ester, and (b) caffeic acid and/or a chlorogenic acid. The preventive or remedy can suppress a rise in blood pressure and alleviate **hypertension**, and is usable as a food.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

TI Compositions and methods for alleviating **hypertension** or preventing a rise in blood pressure

AB Products and compositions for preventing or reducing the severity of **hypertension**. These products contain (a) ferulic acid or a ferulate ester, and (b) caffeic acid and/or a chlorogenic acid. The preventive or remedy can suppress a rise in blood pressure and alleviate **hypertension**, and is usable as a food.

SUMM [0001] The present invention relates to products and compositions that prevent, remedy or reduce the severity of **hypertension** and that are capable of suppressing a rise in blood pressure.

SUMM [0002] **Hypertension** in Japan ranks first among reasons why

patients attend hospitals. According to the National Life Fundamental Survey of Ministry of Health and Welfare (fiscal 1998), in Japan, 64 patients per 1000 were admitted to hospitals for **hypertension**.

SUMM . . . infarction and heart failure and cerebrovascular diseases such as cerebral infarction, cerebral hemorrhage and subarachnoid hemorrhage are closely related to **hypertension** and rank second and third, respectively, among the causes of death of the Japanese.

SUMM [0004] **Hypertension** may be treated by the administration of blood-pressure lowering pharmaceuticals such as diuretics, sympathetic inhibitors, vasodilators or angiotensin-converting enzyme inhibitors. Such drugs are mainly applied to patients suffering from severe **hypertension**. Although many of the pharmaceuticals administered to treat **hypertension** are satisfactory in their effectiveness, significant side-effects such as tachycardia and bradycardia can be a serious burden for patients.

SUMM [0005] **Hypertension**, especially its milder forms, may also be treated by generally improving lifestyle, such as through dietetic therapy, kinesitherapy and limitation. . . The importance of such changes in lifestyle is now being increasingly recognized and appreciated, not only for milder forms of **hypertension**, but also for more severe cases.

SUMM . . . spike of *Schizonepeta tenuifolia* Briq. exerts calcium antagonism and may be useful for the treatment of vascular diseases such as **hypertension** (Japanese Patent Application Laid-Open (Kokai) No. Hei 4-243822).

SUMM [0010] Therefore, one object of the present invention is to provide a preventive or remedy for **hypertension** which has excellent safety, does not become a burden for patients even by daily intake, has higher antihypertensive action and. . .

SUMM [0013] The present invention thus provides products and compositions for the prevention, alleviation or reduction of **hypertension**. These compositions comprise the following components (a) and (b):

SUMM . . . use of the above-described components (a) and (b) for the preparation of a product that prevents, treats, reduces or remedies **hypertension**.

SUMM [0018] A still further aspect of the present invention provides a method for treating **hypertension** that comprises the administration of an effective amount of the above-described components (a) and (b).

SUMM . . . of them, hydroxides of an alkali metal or alkaline earth metal are particularly preferred. As a preventive or remedy for **hypertension** according to the present invention, such a salt, which has been prepared in advance, may be added to a composition. . .

SUMM [0030] The preventive or remedy for **hypertension** according to the present invention can be formed into an orally administrable or parenterally administrable composition by adding to its. . .

SUMM [0031] The compositions for preventing or treating **hypertension** or high blood pressure according to the present invention have a high degree of safety so that no problem occurs. . .

SUMM [0033] It is preferred for an adult (weight: 60 kg) to take the preventive or remedy for **hypertension** according to the present invention so that the total amount of Components (a) and (b), the effective ingredients, would be. . .

SUMM . . . caffeic acid and/or a chlorogenic acid, compositions comprising any of these ingredients may be formulated to decrease the effects of **hypertension** or reduce high blood pressure.

SUMM [0035] Foods or beverages associated with **hypertension** may advantageously be supplemented with caffeic acid, a chlorogenic acid and/or ferulic acid in dosages that preferably inhibit or reduce. . . the hypertensive effects of the food or beverage. For instance, beverages containing caffeine, such as coffee, have been associated with **hypertension** and may be supplemented with amounts of caffeic acid, chlorogenic acid and/or ferulic acid to reduce hypertensive effects associated with. . .



SUMM . . . a chlorogenic acid and/or ferulic acid may also be compounded as food or nutritional supplements in amounts which preferably reduce **hypertension**. For instance, these substances may be admixed with a pharmaceutically acceptable excipient, filler or carrier. As such, they may be. . .

CLM What is claimed is:  
11. A process for preventing or treating **hypertension** or high blood pressure comprising: administering an effective dose of a composition comprising (a) ferulic acid or an ester thereof,. . .

IT 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid 1135-24-6, Ferulic acid 1135-24-6D, Ferulic acid, esters with triterpenol 16630-40-3 21238-33-5, Cycloartenol ferulate 24276-84-4, Sodium ferulate  
(antihypertensives contg. ferulate and caffeate or chlorogenate)